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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/743,346 | 12/23/2003 | John P. Jonas | 08215-541001 / P03-026852 | 4713 |
| 26171 | 7590 | 10/19/2005 | EXAMINER | |
| FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022 | | | BENENSON, BORIS | |
| | | ART UNIT | PAPER NUMBER | |
| | | | 2836 | |

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

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|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/743,346 | JONAS ET AL. | |
| | Examiner | Art Unit | |
| | Boris Benenson | 2836 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 19 August 2005.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-20 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 19 August 2005 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

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Detailed Actions

1. Amendment received on 08/19/2005 is entered.
 - a. Replacement sheets of drawings (Fig.1 and Fig.2) are entered.

Objection to the drawings is withdrawn.

 - b. Claims 1 and 13-16 are amended.

New Claim 20 is entered.

 - c. Claims 1-20 are pending in the application.

Response to the arguments

2. Applicants argue that rejection of that independent Claims 1 and 15, as being anticipated by Hollenbeck (6,112,535) is improper due current amendments. Argument is convincing. A new Prior Art is provided in response to amended claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Murray (6,687,110). Murray disclosed an Isolating Circuit Breaker And Circuit Protection Arrangement. The Arrangement includes a "first line terminal (Fig 1, Pos.14) is provided on the top of the housing for connection with a supply conductor of a electrical distribution line (not shown), whilst a second line terminal (15) is provided for connection with a load conductor of the distribution line" (Col.7, Lines 13-18), housing (13), a switchgear mechanism (20) which controls connection between the supply conductor and the load conductor of the distribution line and a control module (30) also located in the housing. Murray disclosed, "both the instantaneous current and voltage of the distribution line may be monitored by the control module 30" (Col. 8, Lines 11-13).

Referring to Claims 2 and 16, Murray disclosed "The electrical signals from the transducers are conditioned and converted into digital form, using an analogue to digital converter (ADC) for example, and passed to the microcontroller 76" (Col.10, Lines 62-25).

Referring to Claims 3, 6, 10 and 18, Murray disclosed "An external communications interface (Fig. 7, Pos.75) may also be

provided to facilitate remote or near field operations or programming tasks, as required" (Col.11, Lines 26-28). Murray disclosed transceivers as part of an external communication interface (75) and a peer communication interface (77). Murray also disclosed "Preferably, the communications transceiver uses an electromagnetic communications medium, suitably employing an analogue modulation scheme" (Col. 5, Lines 30-32). "The electrical signals from the transducers are conditioned and converted into digital form, using an analogue to digital converter (ADC) for example, and passed to the microcontroller (Fig.7, Pos.76)" Col.10, Lines 62-65).

Referring to Claims 5 and 17, Murray disclosed, "In preference, the electronic controller derives power supply from a primary or secondary storage cell" (Col.3, Lines 15-17).

Referring to Claim 7, Murray disclosed, "The sensor arrangement 74 includes transducers, such as current and voltage transformers, for monitoring the distribution line" (Col. 10, Lines 58-60). Analog signals from transducers converted to digital signals and send to the microcontroller (Fig.7, Pos.76). The microcontroller (76) includes a memory device for storing digitized data.

Referring to Claim 8, Murray indicates, "isolating switch, circuit interrupter, actuator and electronic controller arranged

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together on a mounting structure (Fig. 4, Pos. 41, 42, 43) adapted for pole mounting" (Abstract).

Referring to Claims 9 and 19, Murray disclosed, "In addition, the vacuum interrupter may be manually tripped by way of an operating lever 62 which protrudes from a housing containing the electronic controller 61, the current transformer 60 and the magnetic actuator 58 to which the operating lever is mechanically coupled" (Col. 9, Line 66 - Col.10, Line 4).

Referring to Claims 11-12, Murray disclosed at least one vacuum interrupter (Fig.1, Pos. 23). Besides, Murray disclose use of more then one interrupter (Figs. 3 and 6).

Referring to Claims 13 and 14, the isolation circuit breaker of Murray is a fault-isolating device and provides switching or tying operation in the distribution system.

Referring to Claim 20, Murray disclosed, "A further solenoid 34 is also provided for ejecting the second terminal 19 of the isolating switch 18 from the first terminal 17. This ejection occurs subsequent to the control module opening the vacuum interrupter to a "lock-out" condition, that is the vacuum interrupter will no longer be re-closed automatically. This typically occurs after the vacuum interrupter has interrupted load current on two immediately previous occasions generally

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caused by a *fault condition*, which is not able to be cleared"

(Col.8, Lines 14-22) .

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murray (6,687,110) in view of Burton et al. (4,814,712). Murray disclosed an Isolating Circuit Breaker And Circuit Protection Arrangement that includes all the limitation of independent Claim 1, as it was discussed above. Murray disclosed also communication interface, which enables an operator to remotely communicate with the control unit. Murray didn't disclose having a digital interface which being connected to the electronic controls by a cable enable an operator to interface with the electronic controls. Burton et al. teach a Test Kit For a Circuit Breaker Containing an Electronic Trip

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Unit. "The test kit connects with the digital communications circuit within the digital circuit breaker to obtain status information concerning pick-up conditions, trip conditions and fault currents which are viewed on the test kit liquid crystal display" (Abstract). The test kit (Fig.2, Pos 20) is a separate enclosure that through a multi-conductor cable (27) connected to a circuit breaker (10) read on switchgear and enables an operator to interface with digital controller of the circuit breaker. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Murray with teachings of Burton et al. and provide a local access to the controller of the switchgear, because in enable access to the switchgear for maintenance even if remote communication failed.

Final Rejection

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Benenson whose telephone number is (571) 272-2048. The examiner can normally be reached on M-F (8:20-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2800 ext 36. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Boris Benenson
Examiner
Art Unit 2836

B.B.



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